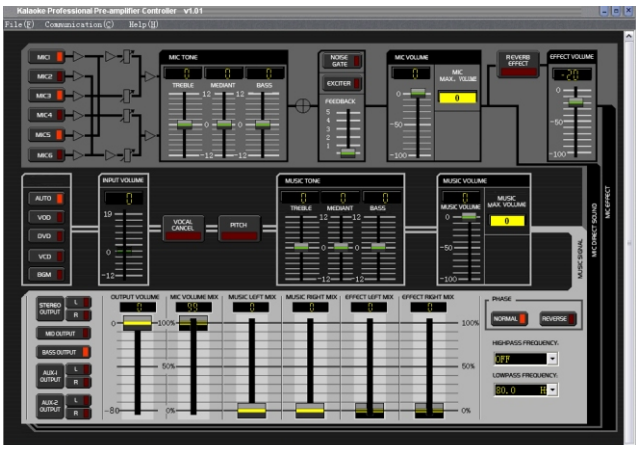
3G Audio

User Manual

Digital Karaoke Pre-processor

KMIX series

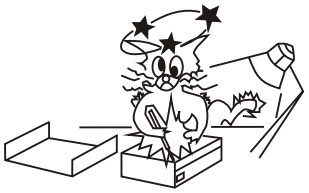


1 Attention ..... >1
2 Product Introduction ..... >2
2.1 Audio Frequency ..... >2
2.2 User Screen ..... >2
2.3 Other Features ..... >2
3 Upacking ..... >3
4 AC power Requirement ..... >3
5 Front Panel Control ..... >4
6 Back Panel Control ..... >4
7 Display and Operation ..... >5
7.1 Main Screen ..... >5
7.2 Other Parameter Setting ..... >6
7.3 System Parameter saving ..... >10
7.4 Remote Control ..... >10
7.5 System Function Lock ..... >10
7.6 PC Control Software GUI ..... >11
8 Built-in Signal Processing Function ..... >11
8.1 Music Channel Processing Module ..... >11
8.2 Mic Channel Processing Module ..... >11
9 System Control Software ..... >11
9.1 How to obtain the software ..... >11
9.2 Software Installation ..... >11
9.3 Software Main Screen and Usage ..... >11
10 FAQ ..... >15
10.1 Audio Frequency Problems ..... >15
10.2 RS232 / S terminal connection ..... >15
10.3 Audio Frequency Switch ..... >15
11 Technical Specification ..... >16
12 System Diagram ..... >17
13 Product Dimension ..... >17

Instruction:

The lightning flash with arrowhead symbol within the equilateral; triangle is intended to alert the user to the presence of un-insulated "angerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.
The exclamation point within the equilateral triangle is intended to alert the user to the presence of important operation an maintenance (servicing) instructions in the literature accompanying this appliance.

Do not open the cover:

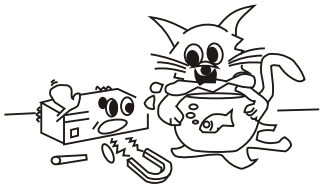


Do not open the cover to avoid the risk of electric shock caused by high voltage parts in the product. Any problems caused by user's wrong actions are out of warranty.

Do not damage the cord:

the cord Please hold the plug when pulling out or plug in the cord. Do not pull out or touch the cord with wet hand, or it will cause the risk of electric shock. Power supply cords should be routed so that they are not likely to be walked upon or pinched by items placed on or against them. When removing the cord from a power outlet be sure to remove it by holding the plug attachment and not by pulling on the cord.

Avoid object and liquid entry:

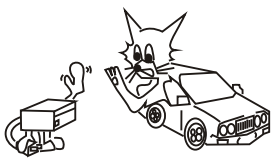


Take care that objects do not fall into and that liquids are not spilled into the inside of the product.If the object or liquid enter the product, please ask qualified personnel to check it.

Abnormal status:

In the event of abnormal noise and smell, please put off the power supply and pull out the cord, please ask qualified personnel to check it.

Nonuse for a long time:



When nonuse it for a long time, please put off the power supply and pull out the cord to avoid the unexpected dangers.

Thanks for choosing Elder's Karaoke Pre-processor. It is designed on the basis of more than ten years of designing concept and experience in Karaoke field. The excellent audio reproduction, special human voice processing and high-performance- price- ratio guarantee your benefit.

It is multi-channel Karaoke Pre-processor and can be matched with power amplifier. It can be used in Professional Karaoke, conference room, multi-function hall, Performance bar and home entertainment. Through digital processing on music and microphone signal, it provides flexible effect processing and output setting. It's very suitable for Karaoke, especially for KTV room. All of functions can be adjusted by panel control button and display in LCD. It also can be connected with PC with built-in control software through RS232. The special 8 output can be set up two groups: One is Left, Right stereo + Center + Bass + Aux1; the other is Stereo AUX2 (according to actual application).

2.1 Audio Frequency

This equipment is adopted 48KHz sampling rate, 24 bits AD/DA conversion technology for distinguish rate, 32bits floating-point DSP for signal processing. Audio frequency consists of music input selection, vocal delete, mid-bass balance, tone change and volume control, tone, echo and mix effect of human voice, even for the noise gate, reverb effect of human voice according to actual application.

2.2 User Screen

Front Panel:

LCD displays the present effect mode, tone change mode, input channel and other information;

Four MIC output socket and Input gain Pot;

Eight Function Key and Three Main volume knob

Remote control receiver

Back Panel:

Four Channel Input, AV swift and remote control OSD display, two channel MIC with left to right, center and bass output and AUX1, AUX2 output.

Control Software

The software can be compatible under Windows98 or advanced system, connecting with PC through RS232 connection can flexibly adjust the equipment and all of settings inside the equipment can be downloaded into computer.

2.3 Other Features:

All of input/output is adopted perfect RF and static protection circuit to make sure the equipment reliability, Also there are many recommended setting for your project installation on the basis of more than 10 years designing concept in Karaoke field, please visit our website to download.

3. UPACKING

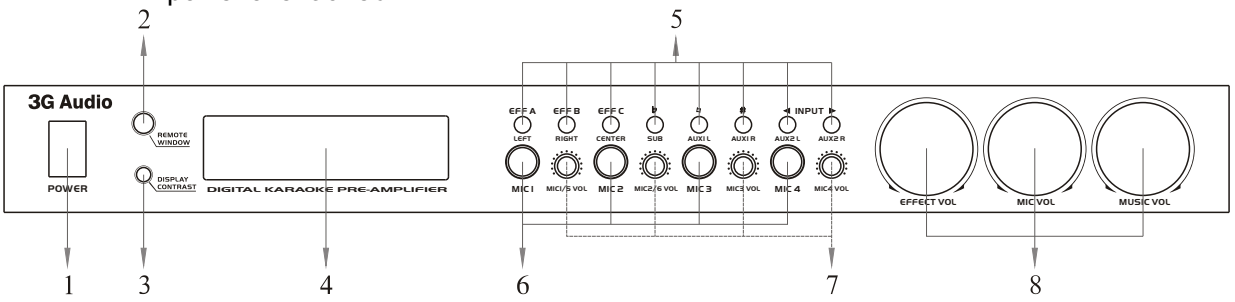
As a part of system quality control, every unit is packed carefully before shipping. Please check carefully if there is any physical damage after unpacking. Please store all of package materials in order to be convenient for future shipment. Once if there is any physical damage, please notify the dealer to supply the official proof including the damage situation.

4. AC POWER REQUIREMENT

⚠ Please make sure the equipment voltage conform to local voltage before connecting.

⚠ The fuse is built inside the equipment. If the fuse is broken, please use the same type of fuse to replace. (Before replacing fuse, please make sure the power cable is disconnected to protect personal security).

Attention: When the equipment is connected with computer, all of knobs and button on the panel are locked.



1 Power switch: Press "1" is power on, the opposite is power off.

2 Infrared remote control window: When you are using remote controller, please don't block the window.

3 Potentiometer: Adjust LCD contrast, the least position in anticlockwise means the lowest contrast, the maximal position in clockwise means the highest contrast.

4 LCD window: Display user's operating information and equipment mode.

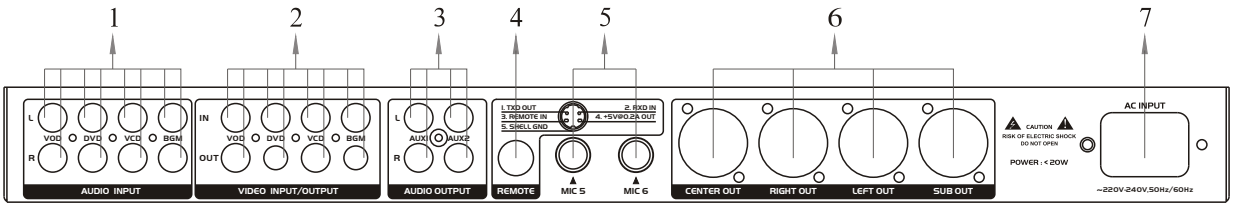
5 Function Key: Total 8 Keys, include effect switch, tonal modification and music source input selection. In subprogram, the 8 keys are accordingly referred to 8 channels of output volume or effect, vocal and proportion of music distribution.

6 MIC input socket: Total 4, available for balanced and unbalanced input.

7 Potentiometer: Total 4 groups, MIC input gain adjustment;

8 Knob: To carry out relevant function with touch key.

6. BACK PANEL CONTROL



4-channel stereo music input, connect with VOD,

1 Socket: DVD, VCD or background signal.

2 Socket: 4-channel video input, connect with VOD, DVD, VCD or background signal, 4-channel daisy connection output.

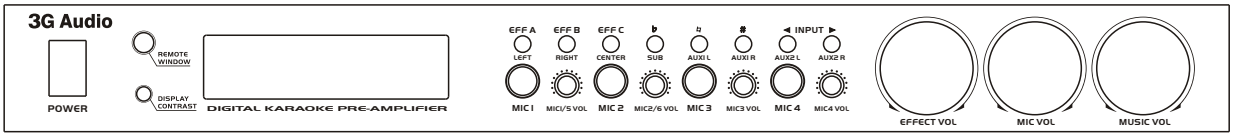
3 Socket: AUX1, AUX2 stereo output;

4 S terminal control: Available to connect with PC for system setting, also can connect with VOD control for remote control.

5 Socket: Total 2 MIC input, Share the same input gain with MIC1, MIC2 of front panel.

6 4-Channel balanced output: Center, Left channel, right channel and subwoofer.

7 Power socket: Three pins (Can be grounded).



7.1 Main Screen

EFFECT_A ♮ M_VOD
EFF-36 MIC-12 MUS-24

the meaning of the display area is as follows:

Image 1

EFFECT_A: One of effects of small, medium and big room

♮: Means the mode of tonal modification, it's one of modes of b4, b3, b2, b1, ♮ , #1, #2, #3, #4. The head letter is "b" indicates falling tone, the head letter is "#" indicates increasing tone. The bigger Number is, more obvious the tonal modification effect is. "♮ " means original tone. If there is no music signal for five seconds, the tone will be turned into original one.

M-VOD: Indicates input channel, it's one of eight modes of A_VOD, A_DVD, A-VCD, A-BGM and M_VOD, M_DVD, M-VCD and M_BGM. Prefix A means automatic selection, Prefix M means manual selection. Under automatic selection mode, the order is VOD>DVD>VCD>BGM; Under signal selection mode, if there is no signal input for five seconds, the system will be switched to BGM channel.

EFF-36: Effect master volume is -36dB, Adjust "Effect VOL" knob for present effect master volume, the Max output is 0dB;

MIC-12: MIC master volume is -12dB, Adjust "MIC VOL" knob for present MIC master volume, the Max output is 0dB,

MUS-24: Music master volume is -12dB, Adjust "USIC VOL" knob for present music master volume, the Max output is 0dB.

(Remark: Effect VOL, MIC VOL, MUSIC VOL knobs are named as Master Volume knobs)

1 Effect type selection

In main screen, pressing "EFF_A" or "EFF_B" or "EFF_C" can change the present effect, and display "EFF_A" or "EFF_B" or "EFF_C" accordingly.

2 Tonal modification selection:

In main screen, pressing "b" or "♮ " or "#" can change the present mode of tonal modification and display in relevant position.

3 Music input channel selection:

In main screen pressing "←"or "→" can set up the music input channel and select AUTO, M_VOD, M_DVD, M_VCD, M_BGM and display in relevant position.

7.2 Other Parameter Setting

Remark: Any of 8 Channels volume can enter into menu adjustment through any of master volume knob.

1: Relevant parameter setting:

Image 2

In main screen, press "EFFCT VOL" knob then loose, it is shown as left picture.
(The arrow point to parameter)

Image 3

Adjust "FFECT VOL" knob, choose the parameters which need to be adjusted, press "EFFECT VOL" knob to parameter adjustment, shown as left. (The arrow point to parameter)

Turn "FFECT VOL" knob, the parameter value will be displayed in corresponding place, when the value is adjusted to be right, press "FFECT VOL" knob to exit present parameter adjustment, and return to previous menu. (Photo 2)

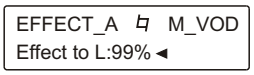


Image 4

If it is necessary to adjust effect proportion distributed to every channel, under "Photo 2" or "Photo 3" mode, press corresponding output channel key on panel (See below silkscreen description), like left screen (take left channel as example, push "EFT"), "Press broken line" to turn "EFFECT VOL" knob, the volume of left will change accordingly.

L OUT VOL:	Output volume of left channel
R OUT VOL:	Output volume of right channel
C OUT VOL:	Output volume of center channel
SUB OUT VOL:	Output volume of bass channel
AUX1-L:	Output volume of left AUX1 channel
AUX1-R:	Output volume of right AUX2 channel
AUX2-L:	Output volume of left AUX2 channel
AUX2-R:	Output volume of right AUX2 channel

Also pressing any of three master volume buttons can enter the screen of parameter selection, turn knobs to choose corresponding channel output volume parameter; then press master volume button to enter window screen of this parameter, turn knob to adjust to be proper value, total 8 channel volume parameters can be adjusted.

At that moment, press "LEFT" key again, it can be switched to " OUT VOL" window screen, shown as Photo 5.

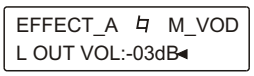


Image 5

Turn "EFFECT VOL" knob, MIC effect to left channel will change accordingly. That's to say, the channel output volume and effect proportion can be adjusted independently, after adjustment is done, please press "FFECT" knob to return previous parameter adjustment, the arrow points to parameter values.

EFFECT parameters are shown as below:

There are 21 parameters can be adjusted through turning "EFFECT VOL" knob:

Echo Delay Time:	range【0, 99】, default: 33
Echo Repeat:	range【0, 99】, default: 36
Rev Time:	range 【0, 99】, default: 56
Rev/Echo:	Effect proportion of Reverb, range 【0, 99】, the bigger number is, the more is Rev Proportion, default: 0% (EFFECT A), default: 50% (EFFECT B), 99% (EFFECT C)
Noise Gate:	Choose ON or OFF, default: OFF (optional function)
Feedback Control:	Range 【0, 5】, 0 indicates feedback control function, the bigger number is, the stronger feedback control is.

The parameters can be adjusted by keys of each channel:

Effect to L:	Effect output to left channel, range【0%, 99%】, default: 99%
Effect to R:	Effect output to right channel, range【0%, 99%】, default: 99%
Effect to C:	Effect output to center channel, range【0,99%】, default: 99%
Effect to AUX1 L:	Effect output to AUL1 left channel, range【0,99%】, default: 99%
Effect to AUX1 R:	Effect output to AUL1 right channel, range【0,99%】, default: 99%
Effect to AUX2 L:	Effect output to AUX2 left channel, range【0,99%】, default: 99%
Effect to AUX2 R :	Effect output to AUL2 right channel, range【0,99%】, default: 99%
L OUT VOL:	Left channel volume, range: -80dB0dB, 1dB/level, default: 0dB
L OUT VOL:	Right channel volume, range: -80dB0dB, 1dB/level, default: 0dB
C OUT VOL:	Center channel volume, range: -80dB0dB, 1dB/level, default: 0dB
SUB OUT VOL:	Sub channel volume, range: -80dB0dB, 1dB/level, default: 0dB
AUX1L OUT VOL:	AUX1 left channel volume, range: -80dB0dB, 1dB/level, default: 0dB
AUX1R OUT VOL:	AUX1 right channel volume, range: -80dB0dB, 1dB/level, default: 0dB
AUX2 L OUT VOL:	AUX2 left channel volume, range: -80dB0dB, 1dB/level, default: 0dB
AUX2 R OUT VOL:	AUX2 right channel volume, range: -80dB0dB, 1dB/level, default: 0dB

2: MIC parameter setting

Image 6

In main screen, press "MIC VOL" knob, then loose it, shown as left screen (the arrow points to parameters)

Image 7

Turn " MIC VOL" knob, choose the parameter need to be adjusted, press "MIC VOL" know to enter parameter adjustment, shown as left screen (the arrow points to parameters)

Turn " MIC VOL" knob, the parameters will display in relevant position, after the parameter adjustment is done, press "MIC" knob to back to present parameters adjustment, and return previous menu (Photo 6).

Image 8

If it's necessary to adjust proportion of MIC direct volume to each channel, under Photo 6 or Photo 7 mode, press the output channel key on panel, and shown as left screen (take left channel as example, press "LEFT" key), turn "MIC VOL" knob, The proportion of MIC direct volume will change accordingly.

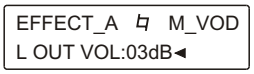


Image 9

Then press "LEFT" key again, it can be switched to L OUT VOL (Left channel output volume) screen, shown as left photo:

The L OUT VOL will change accordingly. That's to say, the volume of each channel can be adjusted independently. After the volume adjustment is done, and press "MIC VOL" to turn back to previous parameter adjustment, the arrow points parameters.

MIC Parameters are shown as below:

There are 22 parameters can be adjusted by turning "MIC VOL" Knob.

MIC1/3/5 BASS: MIC bass (160Hz) adjustment of first group MIC, range 【-12, +12】, 1dB/level, default: 0dB

MIC1/3/5 MID: MIC midrange (1KHz) adjustment of first group MIC, range 【-12, +12】, 1dB/level, default: 0dB

MIC1/3/5 TREBLE: MIC treble (6.3 KHz) adjustment of first group MIC, range 【-12, +12】, 1dB/level, default: 0dB

MIC2/4/6 BASS: MIC bass (160Hz) adjustment of second group MIC, range 【-12, +12】, 1dB/level, default: 0dB

MIC2/4/6 MID: MIC midrange (1KHz) adjustment of second group MIC, range 【-12, +12】, 1dB/level, default: 0dB

MIC2/4/6 TREBLE: MIC treble (6.3 KHz) adjustment of second group MIC, range 【-12, +12】, 1dB/level, default: 0dB

The parameters can be selected by each channel key:

Direct to L: MIC direct volume to left channel, range 【0%, 99%】, default: 99%

Direct to L: MIC direct volume to right channel, range 【0%, 99%】, default: 99%

Direct to L: MIC direct volume to center channel, range 【0%, 99%】, default: 99%

Direct to AUX1 L: MIC direct volume to AUL1 left channel, range 【0, 99%】, default: 99%

Direct to AUX1 R: MIC direct volume to AUL1 right channel, range 【0, 99%】, default: 99%

Direct to AUX2 L: MIC direct volume to AUX2 left channel, range 【0, 99%】, default: 99%

Direct to AUX2 R: MIC direct volume to AUL2 right channel, range 【0,99%】, default: 99%

L OUT VOL: Left channel volume, range: -80dB0dB, 1dB/level, default: 0dB

L OUT VOL: Right channel volume, range: -80dB0dB, 1dB/level, default: 0dB

C OUT VOL: Center channel volume, range: -80dB0dB, 1dB/level, default: 0dB

SUB OUT VOL: Sub channel volume, range: -80dB0dB, 1dB/level, default: 0dB

AUX1L OUT VOL: AUX1 left channel volume, range: -80dB0dB, 1dB/level, default: 0dB

AUX1R OUT VOL: AUX1 right channel volume, range: -80dB0dB, 1dB/level, default: 0dB

AUX2 L OUT VOL: AUX2 left channel volume, range: -80dB0dB, 1dB/level, default: 0dB

AUX2 ROUT VOL: AUX2 right channel volume, range: -80dB0dB, 1dB/level, default: 0dB

3. Setup of music related parameter

Image 10

Under main interface, press "music vol" button and then release it, and it will display like the left side interface (the arrowhead refers to the parameter program)

Image 11

Return "music vol" button, choose adjustable parameter program, and then press "music vol" button to enter the adjustment of parameter value, the interface will be the left (the arrowhead refers to the parameter value)

Turn "Music Vol" button, parameter value will display at the relative position, after suitable adjustment, press "Music Vol" button to exit present adjustment of parameter value, and then return to upper parameter program to choose the menu.(image 10)

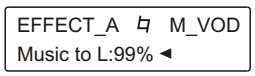


Image 12

If it needs to adjust music to the ratio of all output channels, under the condition of Image 10 and Image 11, press the output channel key of the panel , we will get the interface like the left side (take left voice channel for example, press "LEFT" button...) turn "MUSIC" button, the ratio of music to left channel will relatively change.

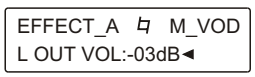


Image 13

At this time, repress the "LEFT" button; it can convert to adjust L OUT VOL (the volume of left channel) parameter to adjust the interface, it will display as left.

Turn "MUSIC "button, the volume of left channel will change.
Analogy as above, we can individually adjust other volume of channels, after suitable adjustment, press "MUSIC VOL"button to exit present adjustment of parameter value , the arrowhead refers to parameter program.

The related parameter of Music just as follows:
Trough turning "MUSIC VOL" button to choose the parameter program (24pcs):

Music Vocal Cancel: cancel of music singing, can choose 0(off), 1(L), 2(R), 3(L-R), absent: off

Music Bass: adjustment of bass music (100HZ), the range is (-12-+12), 1dB/class, absent: 0dB

Music Mid: adjustment of mid music (1 kHz), the range is (-12-+12), 1dB/class, absent: 0dB;

Music Treble: adjustment of treble Music (10 kHz), the range is (-12-+12), 1dB/class, absent: 0dB;

SUB LPF: Frequency adjustment of low channel filter, the range is (80Hz, 335Hz), according to 1/12 times of frequency, there are altogether 26 classes, absent: 200Hz low channel;

SUB HPF: Frequency adjustment of high channel filter, the range is (off, 80Hz) according to 1/12 times of frequency, there are altogether 26 classes, absent: 40Hz high channel;

Music Max VOL: Music max volume limit, the range is (-24, 0), 1db/foot, absent: 0db;

SUB PHASE: Low phase reversal switch, the range is (Normal) or (reverse).

Parameters can be adjusted with all the channel keys

Music TO L:	Volume of Music output to left main channel: the range is (0%-99%);
Music TO R:	Volume of Music output to right main channel: the range is (0%-99%);
Music TO C:	Volume of Music output to middle channel: the range is (0%-99%);
Music TO SUB:	Volume of Music output to bass channel: the range is (0%-99%);
Music TO AUX1_L:	Volume of Music output to assistant 1 left channel, the range is (0%-99%);
Music TO AUX1_R:	Volume of Music output to assistant 1 right channel, the range is (0%-99%);
Music TO AUX2_L:	Volume of Music output to assistant 2 left channel, the range is (0%-99%);
Music TO AUX2_R:	Volume of Music output to assistant 2 right channel, the range is (0%-99%);
L OUT VOL:	Volume of left channel, the range is -80db-0db, 1db/class, absent: 0db;
R OUT VOL:	Volume of right channel, the range is -80db-0db, 1db/class, absent: 0db;
C OUT VOL:	Volume of mid channel, the range is -80db-0db, 1db/class, absent: 0db;
SUB OUT VOL:	Volume of bass, the range is -80db-0db, 1db/class, absent: 0db;
AUX1L OUT VOL:	Volume of assistant 1 left channel: the range is -80db-0db, 1db/class, absent: 0db;
AUX1R OUT VOL:	Volume of assistant 1 right channel: the range is -80db-0db, 1db/class, absent: 0db;
AUX2L OUT VOL:	Volume of assistant 2 left channel: the range is -80db-0db, 1db/class, absent: 0db;
AUX2R OUT VOL:	Volume Of assistant 2 right channels: the range is -80db-0db, 1db/class, absent: 0db;

7.3 System Parameter saving

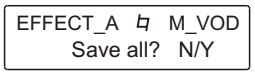


Image 14

The parameter of equipment will preserve automatically, however, the users can still preserve it by hand through the following method:

Under any interface, just press any main volume button for 2 seconds, when the screen reminds whether to preserve all the parameters, just release the button. Turn corresponding button to choose "Y" or "N" to decide whether to preserve or not.

7.4 Remote Control

Using the remote control accessories of these products can operate partial function (such as main volume, effect transfer or modified tone), at this time, if the user has video frequency, it will display the user's adjustable parameter on the top right corner of the monitor; it will automatically cancel the display of video frequency if there is no any remote control within 5 seconds.

7.5 System Function Lock

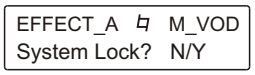


Image 15

In order to avoid changing optionally present system parameter, the users can lock system through this function. Under the condition of system locking, we can only adjust three main volumes (effect, mike, music), effect transfer, modified tone and the selection of source of music, but it can not enter the adjustment of submit menu; but we can set it up trough PC soft wear!

Under any interface, just press any main volume button for 4 seconds, when the screen reminds whether to lock the system (as Image 15) just open the lock. Turn corresponding button to choose "Y" or "N" to decide whether to lock or not, and sign the system in locked condition using "c" on the top right corner of the first line of screen. After locking, the display as the Image 16;

7.6 PC Control Software GUI

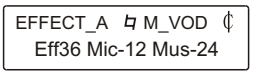


Image 16

When the system and PC control soft ware combine, the system will automatically lock the operation of the device, and display "connecting..."in the second line of the device's screen. At this moment, the users can only use our system function through the device control soft ware. When breaking the combination to the device, the system will recover to the main interface to relieve the locking function.

The Function of inside signal processing

The system frame image and signal processing image please see the twelfth program.

8.1 Music Channel Processing Module

Four-way solid voice signal input, through input selected circuit, automatically or by hand to choose one of the signals (video switch in-phase), after the singing cancel the modules, modified tones and tone adjustment modules, it will output rectangles arrays so that it can distribute flexibly to each output channel;

8.2 Mic Channel Processing Module

Six-way mike, after the adjustment of 4 group of input plus potential equipment (MIC1/5 potential equipment, MIC2/6 potential equipment), we can assign them into two groups (MICI/3/5 and MICI2/4/6): from independent tone processing module to select functional module (noise or feedback depression), one part will input to rectangle arrays, and the other part into voice (digital echo and mixed sound effect) processing module, the effect sound also into output rectangle arrays so that it can distribute flexibly to each output channel.

9. SYSTEM CONTROL SOFTWARE

PC control software provide the users friendly, convenient environment for setting up the parameters of the machines, it can store the parameters into disk document, and also provide very convenient instrument in setting up parameters for many machines , switching and reverting of parameters.

9.1 How to obtain the software

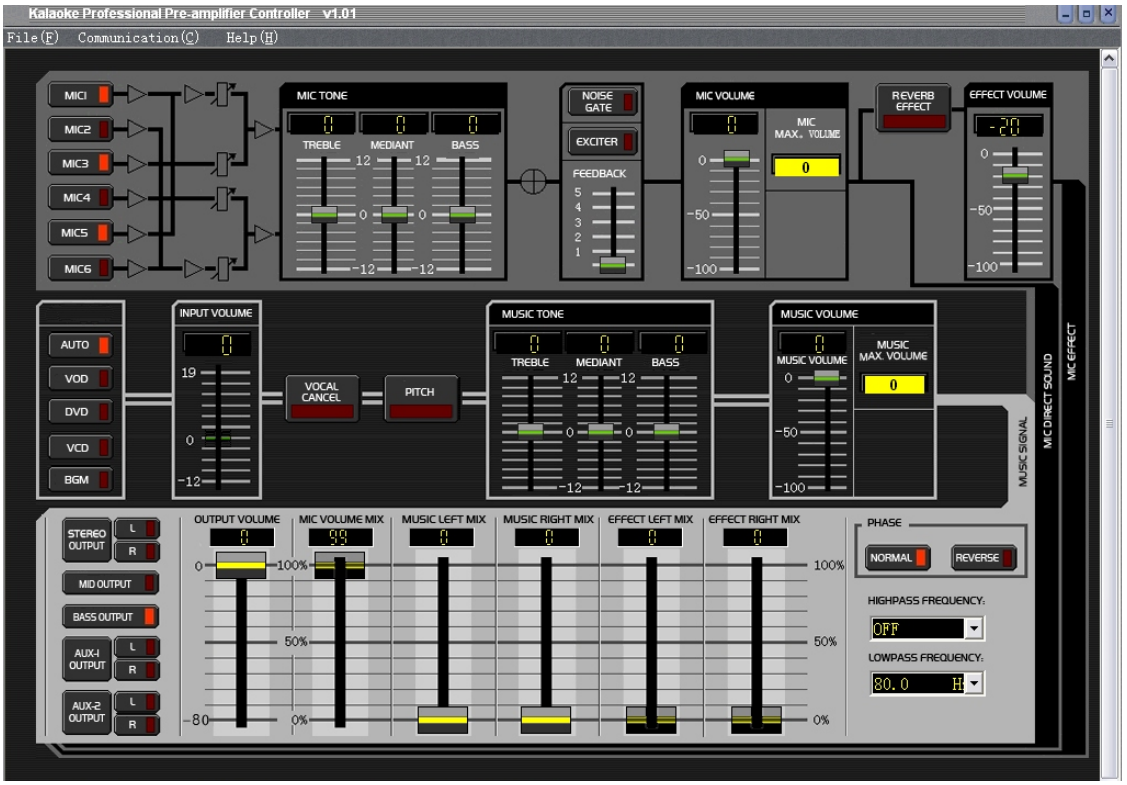
Our exercisable procedure of software is copied into the CD. Of course, you can download the latest edition software and our company's optimized document and factual applying case through our website.

9.2 Software Installation

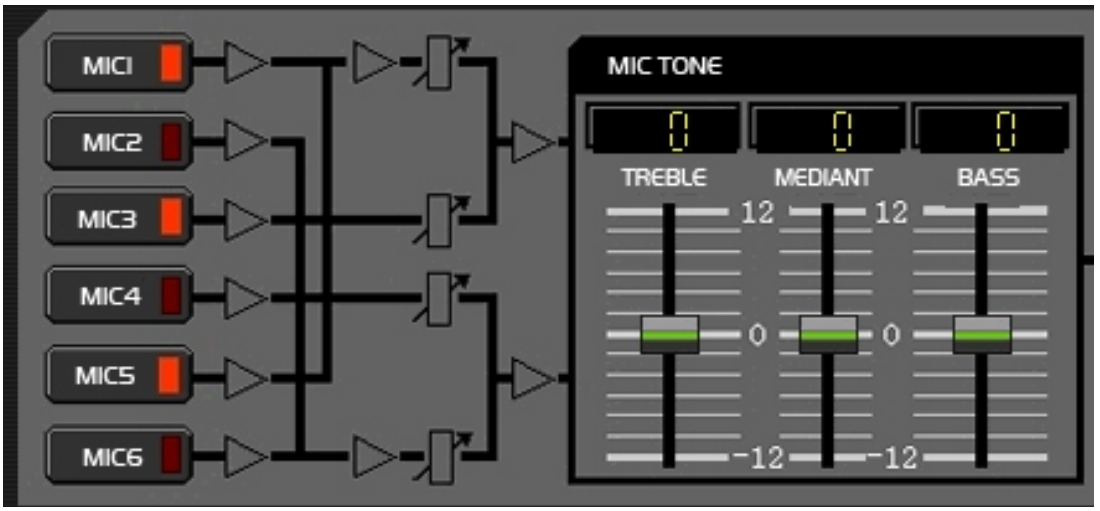
Processing environment: X 86 personal computers, windows98, 2000, xp operational system Document: there is just only one standard WIN32 executable document --- karaoke preamp controller .exe, you can use it in any key or path, if there is a remind that the document is absent, please check completeness of operation system and then download and set up related the absent document in system.

9.3 Software Main Screen and Usage

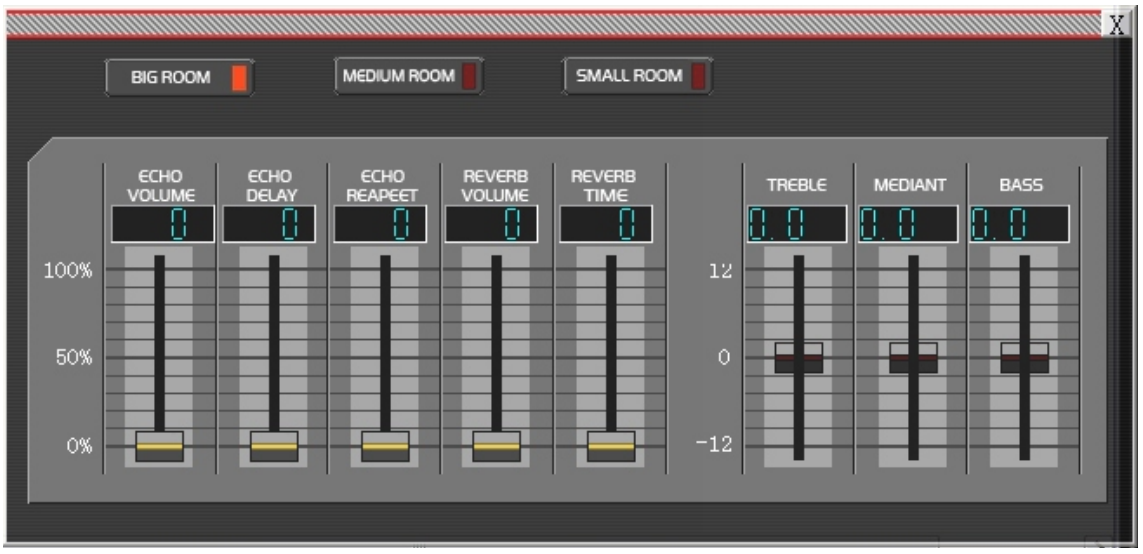
We completely edit the control main interface according to the signal procedure of system, after carrying out; it will display the main interface as the following picture:



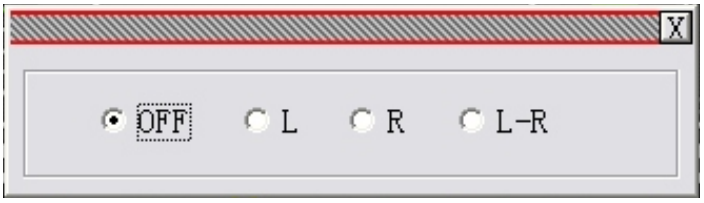
※ MIC tone is defaulted as the first group (MIC1/3/5); it can adjust it through bass, mid, treble. Press MIC2 button, MIC2/2/4/6 will light, just switch to the second group (MIC2/4/6) for adjustment



※ When the two-way signal overlaps, they are in turn: noise door, inspirit, feedback depression, mike volume ,set up of max volume, mixed sound effect, mixed sound volume button and slip pole can adjust each other, when you press "mixed sound effect"button,it will bound the following window, and then it can make three kinds of mixed sound mode,press"small room", "middle room" ,"big room", just switch to the effect which you need to make corresponding adjustment.



※ The music source signal has AUTO,VOD,DVD,VCD,BGM five modes for us to press corresponding button for switching ,after inputting signal selection, they are in turn: input volume,(adjustment forbidding),singing cancel, modified tone, music tone, music volume, max volume, press the button and the slip pole for corresponding adjustment ,among them,press"singing cancel" button, it will bound the following window, and then choose corresponding operation:

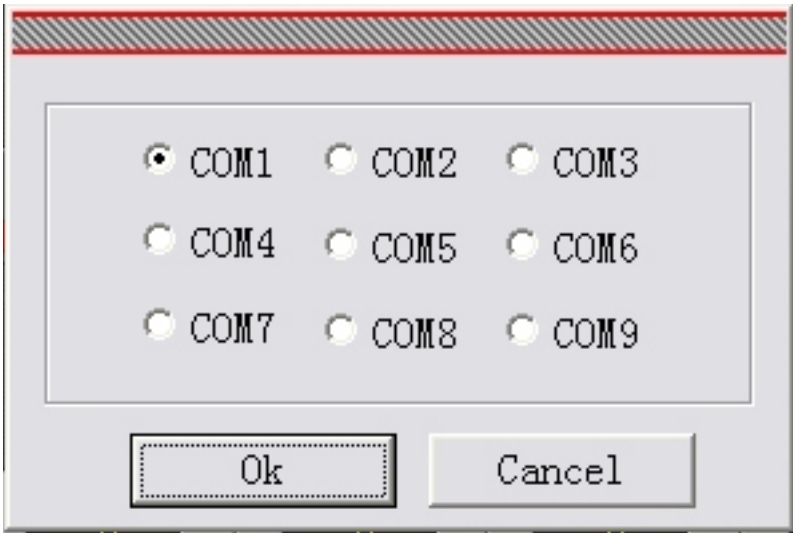


※ press "modified tone" button, it will bound the following window, just choose corresponding operation

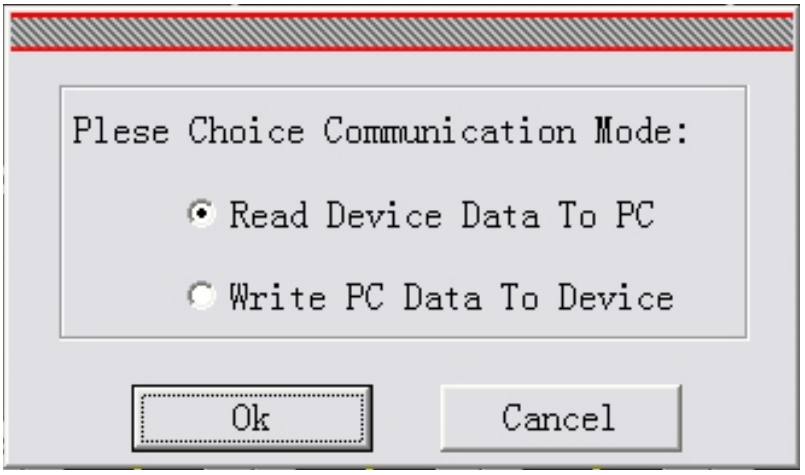
※ Output is 8 channels, using slip poles for corresponding adjustment, among them, we can adjust the left and right channel individually, and also we can connect for adjustment, that is: choosing the check box is the condition of ticking off. The woofers of them provide phase adjustment and adjustment of bass and treble crossover.

※ Operation of connecting PC

First in the main menu "communication"-------"set up for communicating port"
It will display the following window, just check the port of communicating lines, and then choose corresponding port.



And then in main menu "communication"-----" online", it will bound the following windows.



Select corresponding operation, after confirmation and then it will enter online condition, communicating information and communicating condition will display at the bottom window.

※ In main menu" communication"-------"upload the data and store it into equipment"
You can store the satisfied setting which is adjusted into your equipment, as the parameter for next time.
If you want to store to the CD document, you can choose
The main menu" document"----------"open the data setting document", just open it.
The corresponding document information also display at the bottom reminding window.

10.1 Audio Frequency Problems

No Power:	whether power cable is well connected, the power switch of front panel is turn on or not?
The key of panel (or partial function) can not be operated	Checking whether the machine is locked (whether the top right corner display ' ¢ ')? Or whether it is connected with computer? Because under these two modes, partial function is locked, it can be adjusted through the panel.
No sound output	please check whether the volume of output channel is closed or the setting of the music source of output channel is correct (as maybe you set the connecting music of output channel or effect of mike and rate of direct sound as 0) . If there is no output for woofer channel or the output is small, please check whether set the low cut frequency too high or set the low pass too low?
Fault of sound	please check whether set the volume of channel output too small, or set the music source rate of output channel (music, the direct sound of mike, effect sound) too small, or at the same time set the head sound too large?

10.2 RS232 / S terminal connection

Please apply R232 DB9F/S terminal connecting wire, which is matched with our equipment, and then confirm the reliability of both terminal connections.

10.3 Audio Frequency Switch

If the setting is under the situation of automatic input selection, but at this moment, music electronic level is too small, this may result in the wrong action of input select circuit.

We just advise that you transfer to manual input select mode.

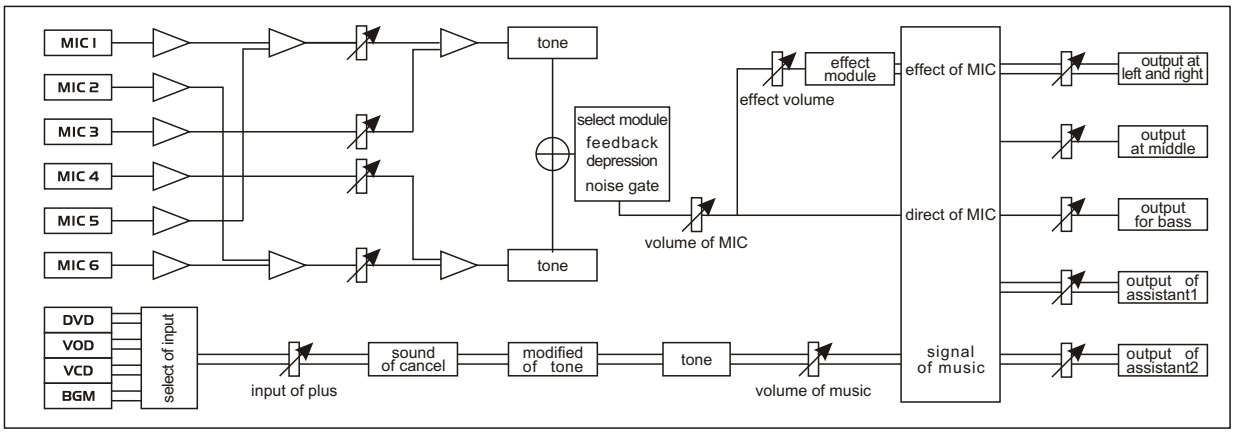
	MIC part	music part
Input impedance	1KΩ	10KΩ
Sensitivity	20mVrms	200mVrms
Overload electrical power	200mVrms	2Vrms
Tone electrical circuit	LF:160Hz@ ± 12dB	LF:100Hz@ ± 12dB
	MF:1KHz@ ± 12dB	MF:1kHz@ ± 12dB
	HF: 6.3KHz@ ± 12dB	HF: 10KHz@ ± 12dB
Frequency response	80Hz~16KHz 0.5dB/-3dB	20Hz~20KHz ± 1.0dB
THD	<0.01%@1KHz	<0.008%@1KHz
Level	3Vrms@1KHz	3Vrms@1KHz
S/N ratio:	>81dB	>92dB
Effect	Mix/REV/Echo/REV+Echo	± 4 class，1/2 musical scale/class

Power requirement	~110V/~220V，50Hz/60Hz，Power consumption<20W
Dimension:	482 × 172 × 44.5mm
Weight:	3.0Kg
Applying temperature:	0℃~+40℃
Storage temperature:	-10℃~ + 60℃

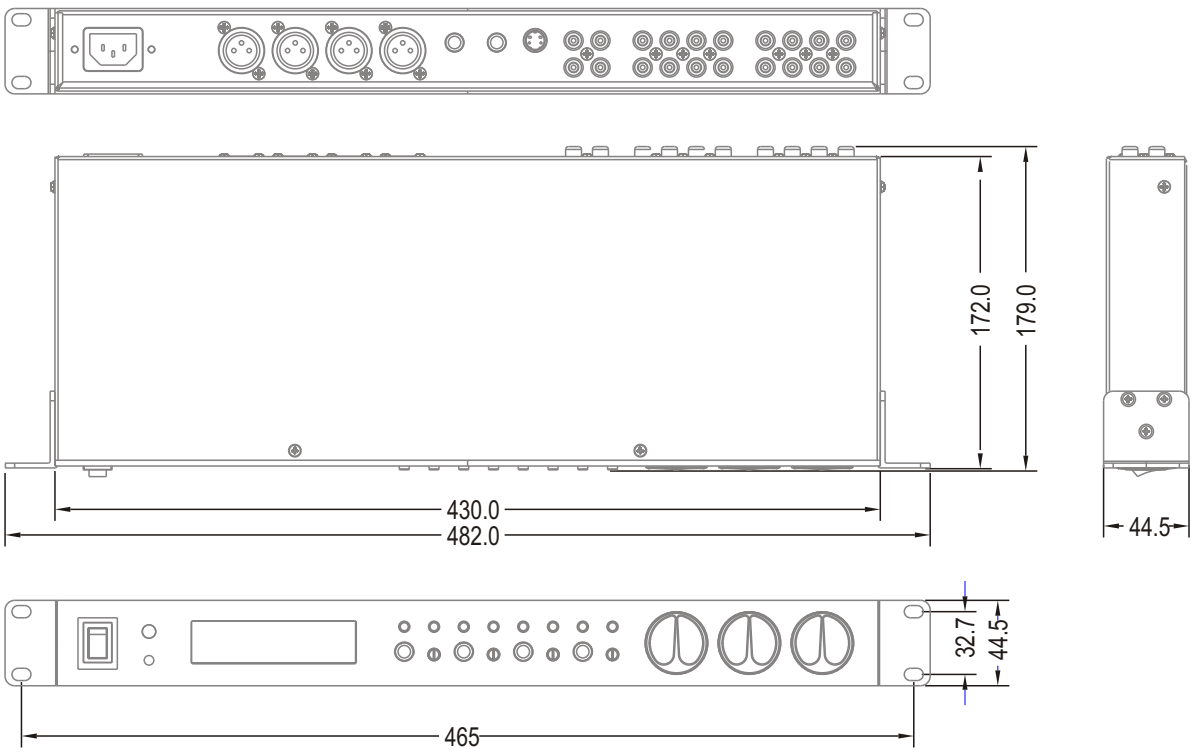
Accessories:	
Power cable:	one pc
Fuse:	one purchase
DSP line:	1pcs(S terminal matches RS232 connector)
Manual user guide:	one pc
CD:	1 pcs Including electrical document of manual user guide and setting process of control software and so on

※ If there is any change for the appearance ,parameter,we will never notice in another way !

12. SYSTEM DIAGRAM



13. PRODUCT DIMENSION



3G Audio
User Manual

3G Audio KMIX series
Digital Karaoke Pre-processor